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TABLES

FIGURES

8.9 AGRICULTURE AND SOILS

8.9.1 Affected Environment

8.9.1.1 Regional Setting

Colusa County is a rural agricultural county located in the northern part of the Sacramento Valley. Over half of the County's 738,000 acres are in agricultural uses, and less than ½ of one percent is in urban uses, as shown below:

Orchards and Vineyards	38,200 acres
Cropland	358,000 acres
Undeveloped Bottomlands	9,300 acres
Undeveloped Rangeland	244,800 acres
National Wildlife Refuges	12,000 acres
National Forest	72,000 acres
Communities	2,500 acres
Rural Subdivisions	1,200 acres

Rice is the most important crop grown in Colusa County. Approximately half of the County's crop acreage is planted in rice. Other important crops include wheat, tomatoes, corn, sugar beets, beans, alfalfa, and grapes. Over 38,000 acres are planted in orchards and vineyards. The most important fruit and nut crops are almonds, prunes and walnuts (Colusa County, 1989; Colusa County Department of Agriculture, 2000).

In 1999, Colusa County produced over $351 million in crops. This was the highest crop production value ever achieved in Colusa County. The county's largest crop, rice, had a value of almost $155 million in 1999, when 528,450 tons of rice were produced. Processing tomatoes had the second highest crop value, at almost $66 million. In comparison, livestock production in Colusa County was valued at $8.4 million in 1999 (Colusa County Department of Agriculture, 2000).

Figure 8.9-1 is an Interim Farmland map prepared by the State of California Department of Conservation for Colusa County. The Department of Conservation's Farmland Mapping and Monitoring Program prepares "Interim" Farmland maps for agriculturally significant areas that do not have available recent soil survey information, as is the case in Colusa County. Rather than labeling land as prime or unique (classifications which are typically related to soil types), the Department of Conservation identifies farmland as irrigated or non-irrigated farmland, or as grazing land (California Department of Conservation, no date). This map indicates that the eastern half of the county is predominantly irrigated farmland, with the western half predominantly non-irrigated and grazing lands.

Figure 8.9-2 shows the distribution of Colusa County agricultural lands that are protected by Williamson Act and Farmland Security Zone contracts as of October 2000. These contracts provide reduced property tax rates to owners who commit to keep their land in agricultural use for a minimum of ten years or more. Most of the prime agricultural land affected by Williamson Act or Farmland Security Zone contracts is located in the valley floor that encompasses the eastern half of Colusa County, while most of the non-prime land affected by these contracts lies in the foothills in the western half of the county.

8.9.1.2 Agricultural Resources in the Project Vicinity

The proposed plant site is part of a 4,800-acre ranch that has been used historically for cattle grazing and dryland grain production. There are two major irrigation canals in the site vicinity. The Tehama-Colusa Canal is located approximately 2,000 feet west of the proposed site, and the Glenn-Colusa Canal is located approximately 3,000 feet to the east of the plant site (see Figure 8.4-1 in Section 8.4). Since the

construction of the Tehama-Colusa Canal, portions of the ranch have been used for irrigated agriculture. At present, the majority of the ranch (including the 200 acres proposed for the power plant site) is leased for cattle grazing. Approximately 80 acres at the northern end of the ranch are fenced and used to grow rice, and approximately 500 acres at the southern end of the ranch are used to produce row crops. None of the ranch acreage is affected by Williamson Act contracts (Mussetter, 2001; Colusa County, 2001).

The proposed power plant site is located in the northern part of Colusa County, in an area that transitions from irrigated farmland to non-irrigated grazing land as one moves west from I-5 toward the foothills. Figure 8.9-3 shows the current uses for farmland within ¼ mile of the proposed power plant site, as well as within ¼ mile of all access roads from I-5 to the plant site. As this figure shows, rice is the most commonly grown crop in the project vicinity between I-5 and the Glenn-Colusa Canal, although some wheat is also grown in this area. Flood irrigation is used to grow these crops. With the exception of a small parcel immediately adjacent to the irrigation canal, on which rice is grown, the land west of the Glenn-Colusa Canal is used for cattle grazing.

8.9.1.3 Soil Types Affected

Soil types in the vicinity of the CPP are shown on Figure 8.9-4. Soils are described and mapped at the level of "mapping units" which are defined to the approximate level of detail appropriate for soil management decision making. The location and properties of the soil mapping units were identified from draft maps of the area using an aerial photograph base and from preliminary drafts of soil property descriptions, both prepared by the Natural Resources Conservation Service. The Soil Survey of Colusa County has not yet been published in hard copy form. Of the 17 soil mapping units illustrated on Figure 8.9-4, only 7 will potentially be affected by the construction of the CPP. Table 8.9-1 summarizes the physical and chemical characteristics of these 7 soil mapping units and provides interpretations for erosion (erosion hazard index and revegetation potential) and agricultural productivity (Storie index, land capability, and prime agricultural land status). The following paragraphs provide a brief description of the soil types potentially affected by CPP construction.

Al – Alcapay Clay, 0 to 1 Percent Slopes

This nearly level soil is somewhat poorly drained and makes up basins within the site area. The representative profile is 64 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land use includes irrigated crops. Vegetation includes rice. Surface runoff is negligible to low and there is a slight hazard of water erosion in bare areas.

AaA - Altamont Clay, 5 to 9 Percent Slopes

This soil, which appears in foothills, has medium to high runoff, is well drained, and has high shrink-swell potential. The representative profile is 60 inches, and the permeability is slow. Most areas of this unit are used for livestock grazing. Vegetation includes soft chess, wild oats, annual grasses, and forbs, with scattered blue oak in some areas. Hazard of water erosion in bare areas is moderate. Approximately 60 percent of the plant area is underlain by this soil unit.

AyA – Ayar Clay, 5 to 15 Percent Slopes

This sloped soil is well drained and makes up foothills within the site area. The representative profile is 72 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land use includes livestock grazing. Vegetation includes soft chess and wild oats. Surface runoff is medium to high and there is a moderate hazard of water erosion in bare areas.

CaA – Capay Clay Loam, 0 to 1 Percent Slopes, Occasionally Flooded

This nearly level soil is moderately well drained and makes up basins within the site area. The representative profile is 64 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land use includes livestock grazing. Vegetation includes soft chess, wild oats, and star thistle. Surface runoff is negligible to low and there is a slight hazard of water erosion in bare areas. Approximately 40 percent of the plant area is underlain by this soil.

CaB – Capay Clay Loam, 0 to 3 Percent Slopes

This nearly level soil is moderately well drained and makes up basins within the site area. The representative profile is 33 to 64 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land uses include livestock grazing and homesite development. Vegetation includes soft chess, wild oats, and star thistle. Surface runoff is negligible to medium and there is a slight hazard of water erosion in bare areas.

Cc – Clear Lake Clay, 0 to 2 Percent Slopes, Occasionally Flooded

This nearly level soil is poorly drained and makes up basins within the site area. The representative profile is 80 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land use includes livestock grazing. Vegetation includes soft chess, wild oats, and star thistle. Surface runoff is negligible to medium and there is a slight hazard of water erosion in bare areas.

Hl – Hillgate Loam, 0 to 2 Percent Slopes

This nearly level soil is well drained and makes up terraces in the site area. The representative profile is greater than 60 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land uses include irrigated cropland, nonirrigated cropland, and livestock grazing. Commonly grown crops are almonds and walnuts. Vegetation on grazing areas includes soft chess, wild oats, ripgut brome, filaree, and other annual grasses and forbs. Surface runoff is negligible to low and there is a slight hazard of water erosion in bare areas.

Hcl – Hillgate Clay Loam, 0 to 2 Percent Slopes

This nearly level soil is well drained and makes up terraces in the site area. The representative profile is greater than 73 inches. The permeability is slow and the soil exhibits high shrink potential upon drying. Major land use includes irrigated cropland. Commonly grown crops are rice, corn, tomatoes, beans, and winter grains. Surface runoff is negligible to low and there is a slight hazard of water erosion in bare areas

8.9.1.4 Soil Loss and Erosion

The Universal Soil Loss Equation is typically used to quantify water-induced soil loss in agricultural areas. The Universal Soil Loss Equation was used to estimate the potential amount of soil erosion from the project area for pre-development, during construction and post-development conditions. The existing site is characterized as grassland. Under the existing conditions the estimated soil erosion is one ton per acre per year. During construction, the plant site area, the construction laydown area, and the pipeline alignments will be disturbed. At that time, the surface will be void of vegetation and there will be the highest potential for erosion. Estimated soil erosion is 150 tons per acre per year. However, the use of Best Management Practices (BMPs) such as straw bales, silt fences, limiting exposed areas, etc. will minimize the potential for soil erosion so that the impact would not be significant. Once the project has been constructed, the construction laydown area and pipeline alignments will be reseeded and returned to pre-construction conditions. The plant site will either be covered with facilities or paved, and therefore

there would be no potential for soil erosion from the completed site. In summary, during construction the potential for erosion would be greater than for the existing conditions but will be managed to minimize impacts and after construction the potential for erosion will be negligible compared with the exiting conditions.

8.9.2 Environmental Consequences

8.9.2.1 Agriculture

Project-related impacts would be considered significant if they would result in the conversion of prime agricultural land to non-agricultural use, or impair the agricultural productivity of prime agricultural lands.

The proposed project would convert approximately 200 acres from cattle grazing to an industrial use. This would be a loss of approximately 0.1 percent of Colusa County's grazing lands. The 200 acres are not rated as prime farm land by the State Department of Conservation, nor are they enrolled in any Williamson Act or Farmland Security Zone contracts. Agricultural uses of the remaining 4,600 acres of the Holthouse Ranch would not be affected by the project. None of the properties potentially affected by construction of linear features and road improvements required by the project is affected by Williamson Act or Farmland Security Zone contracts. The project would not result in conversion of prime agricultural land to non-agricultural use.

The construction and operation of the power plant would not adversely affect the agricultural productivity of surrounding agricultural lands. No surrounding agricultural land would be permanently disturbed. The replacement of the Teresa Creek Bridge on McDermott Road, however, could result in temporary disturbance of up to 2 acres of irrigated agricultural land currently used to grow rice, unless the detour road option were selected. BMPs described in Mitigation Measures AG-1 and AG-2 in Section 8.9.4 will protect surrounding agricultural lands from flooding, erosion, sloughing, and sedimentation during both construction and operation. Because plant emissions during operation would not affect the revegetation potential of the soil, no effect on agricultural productivity would be expected from this source. This is discussed in detail in Section 8.2.2.3.5.

8.9.2.2 Soils

Significance criteria have been selected based on California Environmental Quality Act guidelines (Appendix G, Environmental Checklist Form) as well as performance standards adapted by responsible agencies. From a soil resources standpoint, an impact may be considered significant if the project results in substantial soil erosion or loss of topsoil.

Construction

Construction impacts on soil resources can include increased soil erosion and soil compaction. Soil erosion causes the loss of topsoil and can increase the sediment load in surface receiving waters downstream of the construction site. The magnitude, extent, and duration of this construction-related impact depends on the erodibility of the soil, the proximity of the construction activity to a receiving water, and the construction methodologies, duration, and season. The erosion characteristics of the soil types within the area affected by construction of the CPP are slight to moderate. In addition, BMPs will be implemented during construction; therefore, impacts from soil erosion are expected to be less than significant. Typical BMPs are outlined in Section 8.9.4.

Construction of the proposed project would result in soil compaction due to the erection of foundations and paving. Soil compaction would also result from vehicle traffic along temporary access roads and in equipment staging areas. Compaction densifies the soil, reducing pore space, and impeding water and gas

movement through this medium. This can result in increased runoff, erosion, and sedimentation. The incorporation of BMPs during project construction will result in less-than-significant impacts from soil compaction. Topsoil removed from the site in preparation for construction of foundations and other project facilities will be stockpiled and reused on site after construction is completed.

Operation

Plant operation would not result in impacts to the soil from erosion or compaction. Routine vehicle traffic during plant operation will be limited to paved areas, and standard operational activities should not involve the disruption of soil.

Emissions from the proposed plant will not significantly affect revegetation potential because predicted stack emissions are not expected to result in concentrations that exceed the U.S. EPA prevention of significant deterioration significant impact levels for either short-term or annual averaging periods for CO, PM_{10}, $PM_{2.5}$, NO_x, or SO_2. The effects of cycling of pollutants in the soil-vegetative system are discussed in detail in Section 8.2.2.3.4.

8.9.3 Cumulative Impacts

The County of Colusa's General Plan and Zoning Ordinance have strong provision for protecting and enhancing agricultural land, and the proposed project would not adversely affect agricultural productivity. Soil erosion and sedimentation impacts associated with the proposed project are construction-related; these would be short-term impacts and would be minimized by implementation of mitigation measures. Of the few other major projects planned within the time frame of the proposed project, only the proposed natural gas storage facility would likely have any construction overlap with the CPP, as it is currently scheduled to begin construction in late 2003. By this time, the major ground-disturbing activities of the CPP would have been completed. The CPP would therefore not cause or contribute to a significant cumulative impact to agriculture or soils.

8.9.4 Mitigation Measures

This section discusses mitigation measures proposed by the Applicant that will be implemented to reduce project-related impacts to agriculture and soils.

8.9.4.1 Agriculture

There are no potentially significant farmland impacts identified. Therefore, no mitigation measures are proposed.

8.9.4.2 Soils

Standard BMPs will be incorporated into project design for construction and operation, and will minimize onsite soil erosion and offsite sedimentation. Temporary erosion control measures would be required during the construction period to help maintain water quality, protect property from erosion damage, and prevent accelerated soil erosion or dust generation. These measures will be installed before construction begins and will be removed after completion.

AG-1 Temporary Erosion Control Measures

Typically, temporary erosion control measures include revegetation, slope stabilizers, dust suppression, construction of berms and ditches, and sediment barriers. Vegetation is the most efficient form of erosion control, because it stabilizes the soil and maintains the landscape. Vegetation reduces erosion by absorbing raindrop impact energy and holding soil in place with fibrous roots; it reduces runoff volume

by increasing infiltration into the soil. Disturbed areas will be revegetated with rapidly growing groundcover as soon as possible after construction, and vehicle traffic will be restricted from revegetated areas.

During construction of the proposed project, dust erosion control measures will be employed to minimize the wind-blown erosion of soil from the site. Clean water will be sprayed on the soil in construction areas to suppress dust and during revegetation.

Sediment barriers, such as straw bales or silt fences, slow runoff and trap sediment. They are generally placed below disturbed areas, at the base of exposed slopes, below the disturbed area. Sediment barriers are often placed around sensitive areas, such as wetlands or creeks, to prevent contamination by sediment-laden water. Barriers will be placed around the proposed project and the active construction area of the CPP to prevent sediment from leaving the site. Because the CPP site is relatively level to gently sloping, standard surface erosion control techniques should be effective. Runoff retention basins, drainage diversions, and other large-scale sediment traps are not expected to be needed because of the topography. Soil stockpiles generated during construction will be covered and protected from rainfall if left on site for long periods of time.

AG-2 Permanent Erosion Control Measures

Permanent erosion control measures include drainage systems and revegetation. Revegetation will follow from planting for short-term erosion control, because seed mixes will contain annuals that establish ground cover quickly, perennials and reseeding annuals for long-term vegetation, and legumes to provide a source of nitrogen to the plant community. Due to the site's gently sloping nature, additional long-term measures should not be required.

8.9.5 Laws, Ordinances, Regulations and Standards

The proposed project will be constructed and operated in accordance with all LORS applicable to agricultural and soil resources.

Federal, state, and local LORS applicable to agriculture and soils are discussed below and summarized in Table 8.9-2.

Federal

The Clean Water Act empowers the U.S. EPA with regulation of wastewater and storm water discharges into surface waters by using National Pollutant Discharge Elimination System (NPDES) permits and pretreatment standards. At the state level, these permits are issued by the Regional Water Quality Control Boards (RWQCB), but the U.S. EPA may retain jurisdiction at its discretion. The Clean Water Act's primary effect on the CPP is with respect to the control of soil erosion during construction. Please refer to Section 8.14.5 for a discussion of the proposed project's compliance with NPDES requirements.

State

The Porter-Cologne Water Quality Control Act of 1972 is the state equivalent of the federal Clean Water Act, and its effect on the CPP would be similar. The RWQCB, which controls surface water discharge, may become involved indirectly if soil erosion threatens water quality. Please refer to Section 8.14.5 for a discussion of the proposed project's compliance with the Porter-Cologne Water Quality Control Act and compliance with water discharge requirements of the RWQCB. CEQA requires an evaluation of impacts on state prime agricultural lands by the project. This evaluation is presented in Section 8.9.2.1, above.

Local

Refer to Section 8.4.5 for a discussion of plans, policies and ordinances governing agricultural land in Colusa County. The Applicant has filed a request for a Colusa County General Plan Amendment and change in zoning. This application will undergo CEQA compliance as part of this CEC process.

With approval of this application by the Colusa County Board of Supervisors, the project will comply with all plans, policies, ordinances, regulations, and standards applicable to agricultural resources.

The Colusa County General Plan encourages development that incorporates soil conservation practices. No other known local laws are applicable. The BMPs described in Section 8.9.4 incorporate soil conservation practices.

8.9.6 Involved Agencies and Agency Contacts

Numerous agencies are involved with farmland and the erosion of soils. These include the National Resource Conservation Service, the California Department of Conservation, the RWQCB, and Colusa County. The agencies and their contacts are shown below.

Issue	Agency/Address	Contact/Title	Telephone
Soil erosion/cycling of pollutants	U. S. Department of Agriculture, National Resources Conservation Service 100 Sunrise Blvd., Suite B Colusa, CA 95932	Dan Martynn, District Conservationist	(530) 458-2931
NPDES General Permit for storm water discharges associated with construction activities	Central Valley Regional Water Quality Control Board 3443 Routier Road Sacramento, CA 95827	R. Kyle Ericson Water Quality Control Engineer	(916) 255-3000
Soil erosion	University of California Agriculture & Natural Resources Cooperative Extension 100 Sunrise Blvd., Suite B Colusa, CA 95932	Mike Murray, Colusa County Director	(530) 458-2931
Protection of prime agricultural land	California Department of Conservation Farmland Mapping and Monitoring Program 801 K Street MS 13-71 Sacramento, CA 95814	Dennis O'Bryant, Program Manager	(916) 322-5954
Soil erosion	Colusa County Planning and Building Department 220-12th Street Colusa, CA 95932	David J. Kelley, Director	(530) 458-0480

8.9.7 Permits Required and Permit Schedule

Responsible Agency	Permit/Approval	Schedule
Colusa County	Construction permit, grading permit	Obtain before construction begins

Other required permits include a storm water permit, as discussed in Section 8.14, Water Resources.

8.9.8 References

California Department of Conservation. No date. *Definitions for Interim Farmland Map Categories*, faxed from Department of Conservation, Sacramento, April 9, 2001.

Colusa County. 1989. *Colusa County General Plan*.

Colusa County Department of Agriculture. 2000. *Agricultural Crop Report: County of Colusa, 1999*. Harry A. Krug, Agricultural Commissioner.

Colusa County Assessor's Office. 2001. Assessor Inquiries printed by parcel number March 8 and April 3, 2001.

Mussetter, Robert, Property Owner Representative. 2001. Personal communication with Mara Feeney of Mara Feeney & Associates. March 28, 2001.

Natural Resource Conservation Service. 2001. Draft Soil Survey of Colusa County. March 2001. Unpublished.

Table 8.9-1
Soil Mapping Units within the Colusa Power Plant Area
Descriptions and Properties

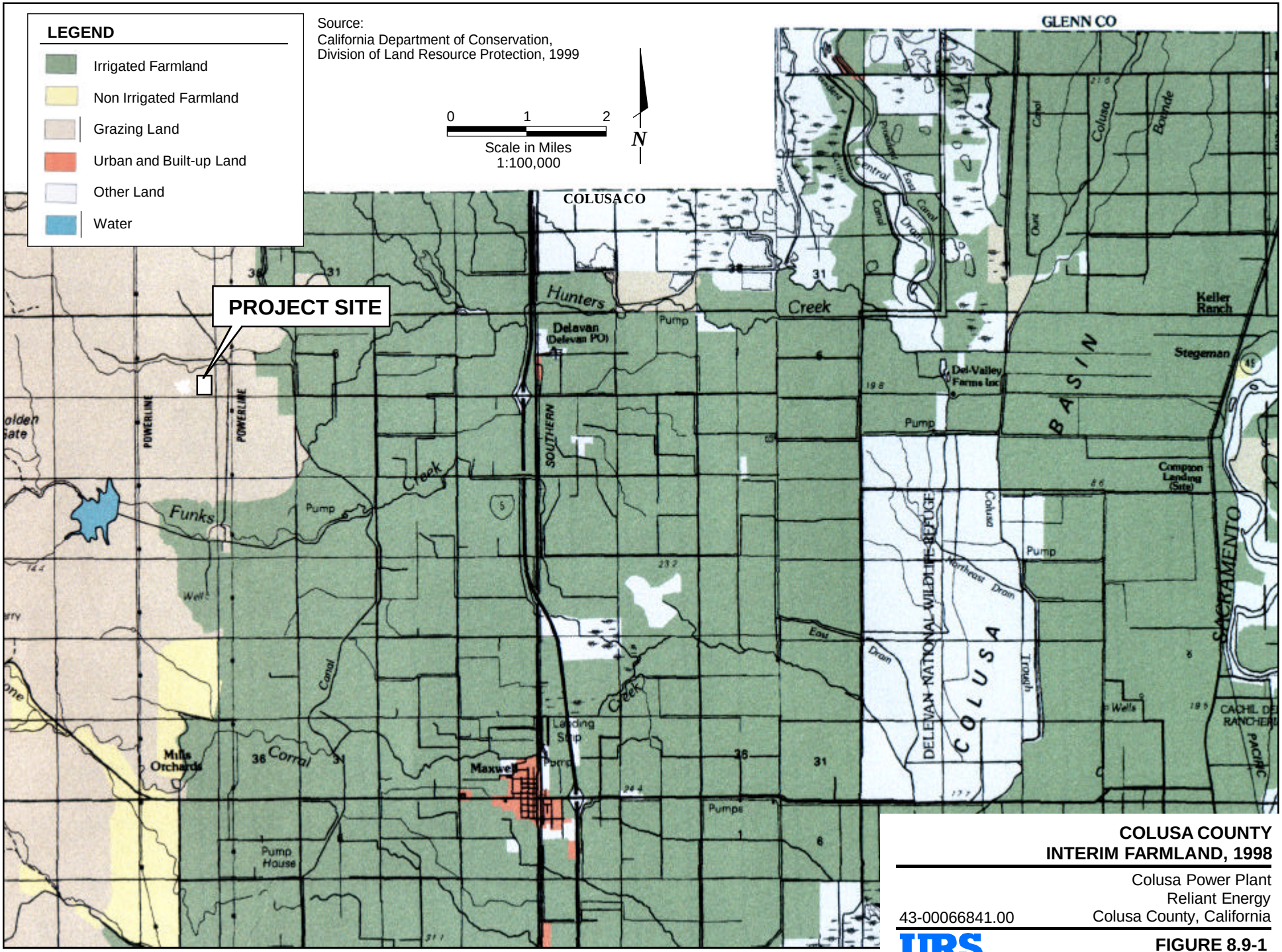
Map Symbol	Soil Series	Texture	Slope (%)	Unit thickness (in.)	Drainage	USCS Classification	Permeability	Erosion Hazard (bare areas)	Erosion Factors K	Erosion Factors T	Vegetative Soil Group	Storie Index (approx.)	Land Capability	pH	Salinity	Parent Material
Al	Alcapay	Clay	0-1	64	somewhat poor	CL	Slow	Slight	0.32	5	F	-	IIIw-5 (irrigated) Ivw-5 (non irrigated)	-	0-8 mmhos/cm (0-35") 4-8 mmhos/cm (35-64")	Mixed rock sources
AaA	Altamont	Clay	5-9	60	well	CL	Slow	Moderate	0.24	4	C	43	IIe-5 (irr.) IVe-5 (non irr.)	6.8	-	Weathered sandstone/shale
AyA	Ayar	Clay	5-15	72	well	CL	Slow	Moderate	0.28	5	C	40	IIIe-5 (irr.) IVe-5 (non irr.)	7.4	-	Weathered sandstone/siltstone/shale
CaA	Capay	Clay	0-1	64	moderately well	CL	Slow	Slight	0.28	5	C	-	IIw-5 (irr.) IVw-5 (non irr.)	6.3	<2 mmhos/cm (0-64")	Mixed rock sources
CaB	Capay	Clay loam	0-3	64	moderately well	CL	Slow	Slight	0.28	5	C	44	IIs-5 (irr.) IVs-5 (non irr.)	6.3	0-2 mmhos/cm (0-60")	Mixed rock sources
Cc	Clear Lake	Clay	0-2	80	poorly	CL	Slow	Slight	0.24	5	C	-	IIw-5 (irr.) IVw-5 (non irr.)	6.4	0-4 mmhos/cm (0-60")	
Hcl	Hillgate	Clay loam	0-2	73	well	CL	Slow	Slight	0.28	5	D	46	IIs-3 (irr.) IVs-3 (non irr.)	-	0-2 mmhos/cm (0-73")	

Notes:

(1) irr. - irrigated
(2) non irr. - non irrigated
(3) USCS - Unified Soil Classification System
(3) K is a measure of relative susceptibility to water erosion. It ranges from 0.02 to 0.69, with lower values representing a lower susceptibility to erosion. T represents soil loss tolerance, which is defined as the maximum amount of erosion at which the qualify of the soil as a medium for plant growth can be maintained. Values range from 1 to 5 (tons per acre per year) with 5 representing soils less sensitive to degradation.
(4) Land Capability - an indication of the suitability of soils for most kinds of field crops. Capability classes are I through VIII. Subclasses are letters e, w, s, or c. Units are 0 through 9.

Table 8.9-2
Applicable Agricultural and Soils Laws, Ordinances, Regulations, and Standards

Laws, Ordinances, Regulations, and Standards	Applicability	Administering Agency	AFC Section
Federal			
Clean Water Act	Federal regulation of wastewater and storm water. Controls erosion of soil and disruption or displacement of surface soil.	U.S. EPA, RWQCB	8.9.5, 8.14.5
State			
Porter-Cologne Water Quality Act	State regulation of soil erosion during construction	RWQCB	8.9.5, 8.14.5
California Environmental Quality Act	Requires evaluation of impacts of project on prime agricultural load.	CEC	8.9.5
Local			
Colusa County General Plan, Policies and Ordinances	Regulation of agricultural lands	Colusa County Board of Supervisors	8.4.5, 8.9.5



COLUSA COUNTY
INTERIM FARMLAND, 1998

Colusa Power Plant
Reliant Energy
43-00066841.00 Colusa County, California

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FIGURE 8.9-1

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Glenn County

Butte County

Lake County

Sutter County

Yolo County

PROJECT SITE

Princeton

Stonyford

Maxwell

Williams

Colusa

Arbuckle

College City

Grimes

Sites

Century Ranch

East Park Reservoir

Mendocino National Forest

PRESERVE

AGRICULTURAL PRESERVE

Norman Road

Maxwell Road

Colusa Road

Hahn Road

Tule Road

Sacramento River

Stonyford-Sites Road

State Highway 45

State Highway 20

State Highway 16

I-5

LEGEND

- Prime Agricultural Land
- Non-prime Land
- Super Williamson Act
- Urban Sphere of Influence

2000-2001 Tax Roll

0 1 2 3 4 5 Miles

0 1 2 3 4 5 6 7 8 9 10 Kilometers

Projection: UTM Meters Zone 10 Datum NAD 27

N

Del Norte, Siskiyou, Modoc, Trinity, Shasta, Lassen, Humboldt, Tehama, Plumas, Mendocino, Glenn, Butte, Sierra, Nevada, Colusa, Yuba, Placer, Lake, Sutter, Yolo, El Dorado, Sonoma, Napa

SOURCE: Geographical Information Center
Data Source: US Census: '95 TIGER Files for road, hydrology, and political boundaries.
Colusa County: Preserve Boundaries and Land Conservation Properties (August 2000).
Geographical Information Center: Section lines derived from DRG's.

COLUSA COUNTY
LAND CONSERVATION ACT ENROLLMENT

Colusa Power Plant
Reliant Energy
43-00066841.00
Colusa County, California

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FIGURE 8.9-2

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GLENN CO.
COLUSA CO.

GLENN CO.
COLUSA CO.

DELEVAN ROAD

TEHAMA-COLUSA CANAL

GLENN-COLUSA CANAL

DIRKS ROAD

DELEVAN ROAD

McDERMOTT ROAD

Approx. 1-Mile Radius

PROJECT SITE

PG&E Compressor Station

230 kV Transmission Line

Teresa Creek Bridge

EA

AP

M

LEGEND

- 200-acre Project Site
- Plant Layout
- Proposed Transmission Line Interconnection
- Water Supply Pipeline
- Natural Gas Pipeline
- Roadway Improvement
- Parcel Boundary
- 16 Parcel Number
- EA Zoning Designation
- 1/4-Mile Limit
- Rice
- Wheat or Row Crops
- Grazing

0 ½ 1
Scale in Miles

0 2000 4000
Scale in Feet
1:24,000

N

Source:
Colusa County Assessor's Parcel Maps:
Bk. 11 pages 4,5,14,22

5/31/01 vsa ..\46800-930\agric.cdr

AGRICULTURAL LAND USE IN THE VICINITY OF THE PROPOSED PROJECT

Colusa Power Plant
Reliant Energy
43-00066841.00 Colusa County, California

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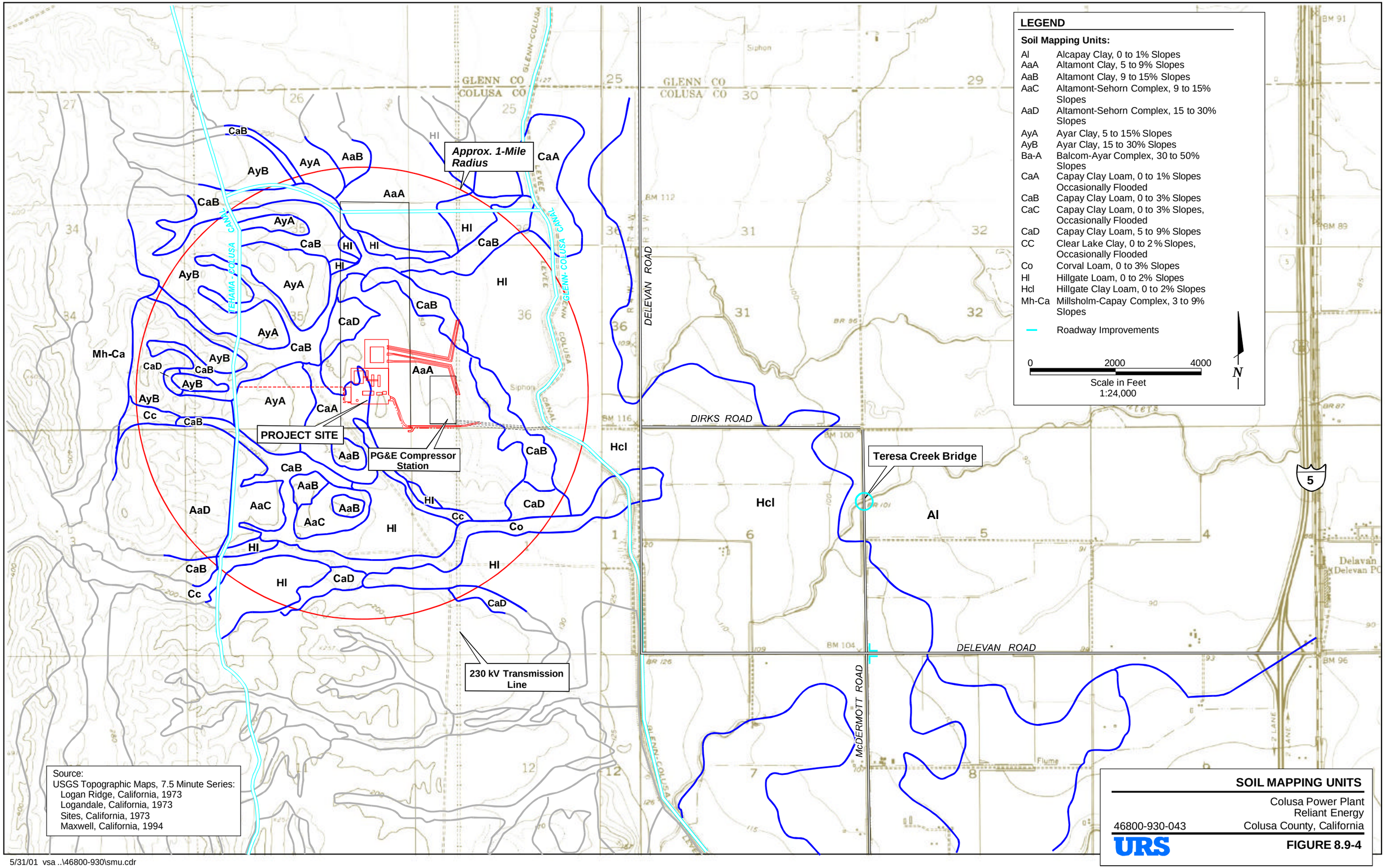
FIGURE 8.9-3



LEGEND

Soil Mapping Units:

Al	Alcapay Clay, 0 to 1% Slopes
AaA	Altamont Clay, 5 to 9% Slopes
AaB	Altamont Clay, 9 to 15% Slopes
AaC	Altamont-Sehorn Complex, 9 to 15% Slopes
AaD	Altamont-Sehorn Complex, 15 to 30% Slopes
AyA	Ayar Clay, 5 to 15% Slopes
AyB	Ayar Clay, 15 to 30% Slopes
Ba-A	Balcom-Ayar Complex, 30 to 50% Slopes
CaA	Capay Clay Loam, 0 to 1% Slopes Occasionally Flooded
CaB	Capay Clay Loam, 0 to 3% Slopes
CaC	Capay Clay Loam, 0 to 3% Slopes, Occasionally Flooded
CaD	Capay Clay Loam, 5 to 9% Slopes
CC	Clear Lake Clay, 0 to 2 % Slopes, Occasionally Flooded
Co	Corval Loam, 0 to 3% Slopes
Hl	Hillgate Loam, 0 to 2% Slopes
Hcl	Hillgate Clay Loam, 0 to 2% Slopes
Mh-Ca	Millsholm-Capay Complex, 3 to 9% Slopes

Roadway Improvements

0 2000 4000

Scale in Feet
1:24,000

N

Source:
USGS Topographic Maps, 7.5 Minute Series:
Logan Ridge, California, 1973
Logandale, California, 1973
Sites, California, 1973
Maxwell, California, 1994

SOIL MAPPING UNITS

Colusa Power Plant
Reliant Energy
46800-930-043 Colusa County, California

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FIGURE 8.9-4

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